The federal financial safety net is intended to protect large financial institutions and their creditors from failure and to reduce the possibility of “systemic risk” to the financial system. However, federal guarantees can encourage imprudent risk-taking, which ultimately may lead to instability in the very system that the safety net is designed to protect.

**KEY POINTS**

- A history of emergency government loans to distressed institutions and markets deemed “too big to fail” has created an expectation that certain parts of the financial sector will be protected from losses.
- This government safety net effectively subsidizes risk-taking. Investors that feel protected by the government will be less likely to demand higher yields as compensation for risk, and creditors will feel less urgency to monitor firms that are assumed to be protected.
- Excessive risk-taking makes firms more likely to experience distress and require bailouts to remain solvent. Additional bailouts can then further erode market discipline.
- This self-reinforcing cycle suggests that the safety net will grow ever larger over time. The safety net has increased by one-third since the Richmond Fed’s first estimate in 1999. It covered 60 percent of financial sector liabilities as of 2016.
- Resolution plans — “living wills” — could be an important tool for establishing credibility against bailouts by making the government safety net the less attractive option in a crisis.

**DISCUSSION**

Occasional turbulence in financial markets is inevitable. There will always be short-term “shocks” that spark new awareness of previously unknown risks, just as the housing market decline that started in 2006 made clear that some financial institutions had taken on greater risk than many investors had realized.

Shocks, however, do not easily or frequently lead to large-scale panics like the global financial crisis of 2007–08. Many complicated factors led to that outcome. In the Richmond Fed’s view, among the most important factors was a long history of government interventions that led market participants to expect government rescues in the event of distress. That financial sector “safety net” may make market participants less inclined to protect themselves from risk, making financial market instability and bailouts more common and severe.

**What Is “Too Big to Fail?”**

Part of the government’s financial safety net is explicit. Deposit insurance, for example, protects relatively small investors, such as households and small businesses. Commercial banks are charged fees for that service and are supervised, which limits their incentive to take risk.

A large portion of the safety net is ambiguous and implicit, however, meaning that it is not spelled out in advance. For decades the federal government has proven its willingness to intervene with emergency loans when institutions seen as “too
big to fail” (TBTF) are on the brink of collapse. Typically, it is not the TBTF firm itself that policymakers seek to protect, but rather its creditors and the markets that the firm relies on for funding. Ultimately, policymakers hope to protect real economic activity. Market participants conduct their business making educated guesses about which markets may be supported in times of distress.

Implicit guarantees effectively subsidize risk. Investors in implicitly protected markets feel little need to demand higher yields to compensate for the risk of loss. Implicitly protected funding sources are therefore cheaper, causing market participants to rely more heavily on them. At the same time, risk is more likely to accumulate in protected areas since market participants are less likely to prepare for the possibility of distress — for example, by holding adequate capital to cushion against losses or by building safeguarding features into contracts — and creditors are less likely to monitor their activities. This is the so-called “moral hazard” problem of the financial safety net: The expectation of government support weakens the private sector’s ability and willingness to limit risk, resulting in excessive risk-taking. As a result, an extensive safety net creates a need for robust supervision of firms benefitting from perceived protection (Ennis and Price 2015).

The more widespread the TBTF problem, the more likely the financial system is to require periodic bailouts to remain solvent, resulting in an even bigger government safety net. This self-reinforcing cycle is the essence of the TBTF problem.

Although the term “too big to fail” has become the popular way to talk about financial safety net issues, it is a misnomer. Protection of some creditors can happen even if a firm fails — that is, even if the shareholders lose everything and management is replaced. In addition, creditors can be protected when government lending causes a firm’s bankruptcy to be delayed, since that allows certain creditors to exit without losses before bankruptcy is declared. The Fed’s discount window has done this in the past (Schwartz 1992).

It is difficult to precisely measure the TBTF problem since expectations are unobservable, as argued by Gary Stern, former president of the Federal Reserve Bank of Minneapolis, and Ron Feldman, the Minneapolis Fed’s current head of Supervision, Regulation, and Credit, in their book on the subject (Stern and Feldman 2004). There is no direct way to observe private markets’ assessment of firms or activities that are implicitly protected. Moreover, the amount of the subsidy provided by implicit support exists only on the margin and is likely to vary across firms and activities. These characteristics make it difficult to directly identify the effects of TBTF treatment on, for example, the relative performance of large and small banks (Ennis and Malek 2005).

A growing literature has tried to measure the funding advantages of implicitly protected firms (for example, see Garbade 2014). Perhaps the most salient evidence of TBTF lies with Fannie Mae and Freddie Mac, the two firms that were most broadly viewed as implicitly supported by a government backstop before the 2007–08 crisis. For decades, markets have been willing to lend more cheaply to these institutions than to competitors that do not benefit from government support, arguably leading to greater risk-taking in mortgage markets. (See Federal Reserve Bank of Richmond, “Our Perspective Housing Finance Policy.”) Economist Wayne Passmore at the Federal Reserve Board of Governors estimated that the value of that subsidy was between $122 billion and $182 billion before the crisis (Passmore 2005). Suspicions of government support were proven correct when the firms were taken into government conservatorship during the financial crisis.

The Richmond Fed’s view is that the moral hazard from the TBTF problem is pervasive in our financial system. The U.S. government’s history of market interventions — including such episodes as the bailout of Continental Illinois National Bank and Trust Company in 1984 and the public concerns raised during the Long-Term Capital Management crisis in 1998 — shaped market participants’ expectations of official support leading up to the events of 2007–08 (Haltom and Lacker 2013). According to Richmond Fed researchers, the proportion of total U.S. financial firms’ private liabilities covered by the federal financial safety net has increased by one-third since their first estimate in 1999. The safety net — what Richmond Fed researchers termed the “Bailout Barometer” — covered 60 percent of financial sector liabilities as of 2016. More than one-third of that support is implicit and ambiguous (Marshall, Pellerin, and Walter 2017).

**Why Does this Problem Exist?**

It is easy to see why the TBTF problem developed. The potential damage from a large firm’s failure is so great
that governments feel compelled to intervene. That damage comes from at least three forms of spillovers described below. In each case, however, longer-term concerns — including the effects of government bailouts — weaken the case for intervention.

Most directly, when a firm fails, it may be unable to honor its financial obligations to other firms, which can snowball until other firms are jeopardized despite being fundamentally sound (Athreya 2009). To some extent, firms will protect themselves from this possibility by charging a premium to counterparties whose risks are unclear. However, the expectation of safety net protection reduces the likelihood that a firm will face the full cost of that risk, so it will be less likely to charge those higher premiums.

A large failure also can provide information about real risks in the economy. However, it is not obvious that it would be desirable or even possible to stop that kind of information from spreading.

Finally, a large firm’s failure can cause market participants to scramble to reassess which of their counterparties are likely to receive government support. This type of panic contributed to the most tumultuous days of the financial crisis after the failure of investment bank Lehman Brothers in September 2008. Earlier that year, the investment bank Bear Stearns was rescued when the Federal Reserve lent funds to JPMorgan Chase to purchase the ailing bank, the first time the Fed had directly extended financing to an investment bank. This unprecedented action, along with others taken to treat the financial market strains, likely signaled that similar support would be available for other firms. Yet in September, Lehman Brothers, at nearly twice the size of Bear Stearns, was allowed to fail. The government appeared to be offering support on a case-by-case basis in a time of already extraordinary market uncertainty (Steelman and Weinberg 2008). But by that time, many investors were too entrenched in their contracts to charge premiums for the risks to which they now understood they were exposed — in particular, the risk that the government would not prevent failures. Lehman’s failure was a turning point after which the financial crisis escalated severely, leading to extraordinary volatility and worsening the downturn in global economic activity. This type of panic — resulting from reassessment of the likelihood of protection — would cease to exist if the government’s safety net boundaries were made explicit and transparent in advance.

In other words, the negative, long-term effects of a large firm’s failure can be amplified by government support. In the short term, financial failures create pain. In the extreme, they could translate to reduced economic activity, increased unemployment, and restricted credit to households and businesses. They make the case for intervention appear stronger, even as policymakers understand the moral hazard problems that intervention creates for the future, contributing to the likelihood of future crises (Lacker 2011b).

For this reason, ambiguity around the implicit safety net nearly guarantees that it will grow ever larger over time (Lacker and Weinberg 2010), as suggested by the growth in Bailout Barometer estimates from before and after the financial crisis (Lacker 2015).

How Can the TBTF Problem Be Fixed?

In the wake of the financial crisis, most policymakers agree that TBTF is a problem that must be addressed to reduce the frequency and magnitude of financial crises. However, financial reforms that have been adopted since the crisis have not solved TBTF.

Efforts since the crisis have focused on broadening the scope of regulation to include all institutions and markets that could be a source of shocks that lead to financial crises. This is often referred to as systemic risk regulation. The 2010 Dodd-Frank regulatory reform law took large steps in this direction, mandating regulators to consider the health of the financial system as a whole when they supervise individual firms, creating the Financial Stability Oversight Council (FSOC) to monitor risks to financial stability, and appointing the Fed as the regulator of financial firms that have been designated by FSOC as “systemically important.” Some have argued for more drastic measures that entail changing the fundamental structure of banking activities (for example, Kashkari 2016). These measures include imposing significantly higher capital requirements (for example, Admati 2016) and “breaking up” large banks by imposing substantial capital surcharges above a certain size (for example, Johnson 2016).

Regardless of the merits of such measures, regulation alone cannot overcome the moral hazard that results from the government safety net. Regulations impose burdens of their own, creating incentive to innovate around them and forcing regulators and rule makers to adapt to an ever-changing financial landscape (Lacker 2011a). Policymakers historically have
tended to follow financial crises with reforms that attempt to constrain risk-taking, and in the next crisis risk shows up in new forms.

Instead, it is essential for firms to face incentives, separate from the requirements of regulators, to limit their own risk-taking. This is called market discipline, and it is a critical element of a well-functioning and stable financial system (Hetzel 2009). Market discipline is created when creditors expect to face the costs of a firm's losses, which generates greater interest in monitoring the risk of firms with which they do business. By definition, implicit guarantees erode market discipline.

Therefore, in pursuit of financial stability, there is no substitute for limiting the government's safety net. There is a range of reasonable views on the exact contours of the safety net's boundaries. But in the Richmond Fed's view, the safety net should focus on smaller creditors because a larger safety net has proven to grow inexorably over time. Regardless of where the safety net boundaries ultimately are drawn, however, making those boundaries explicit should be at the forefront of policymakers' efforts to address the TBTF problem. Yet, despite efforts since the crisis to "end TBTF," both the safety net and its share of implicit guarantees have not shrunk meaningfully (Marshall, Pellerin, and Walter 2017), which necessarily means the TBTF problem is still with us.

A useful step would be for policymakers to publicly commit to adhering to a safety net policy that is transparent and limited in scope. The actions of the federal government, including the Federal Reserve, since the 2007–08 financial crisis have no doubt made it harder for commitments against intervention to be credible. (For a summary of these actions, see Steelman and Weinberg 2008.) The Fed has some experience dealing with seemingly insurmountable credibility problems, however. Many onlookers thought it would be impossible for the Fed to establish credibility that it would fight inflation in the late 1970s. The solution then was to build a reputation for being willing to tighten monetary policy to dampen inflation even if it meant higher unemployment in the short run. (See Federal Reserve Bank of Richmond, “Our Perspective: Price Stability and Monetary Policy.”) Similarly, only building a reputation for limiting bailouts — perhaps in part by letting large firms fail — can avoid the moral hazard the central bank’s lending authority has the potential to create (Goodfriend and Lacker 1999). The stance of the Richmond Fed is that, like in the 1970s, the long-run benefits of credibility are likely to outweigh the short-term costs of the measures taken to establish it.

One step that could help establish credibility against intervention, possibly without having to endure an institution's costly failure, is the creation of “living wills.” Living wills are blueprints, written by firms and evaluated in advance by regulators, for winding down large financial institutions in the event of financial distress. The purpose of living wills is to provide a plan for how a firm's operations could be unwound under the bankruptcy code in a manner that minimizes spillovers and is unassisted from government protection of creditors, preferably with lower costs than a process featuring government assistance. Therefore, living wills present policymakers with a more attractive alternative to emergency “bailouts” in a crisis (Jarque and Price 2014). Moreover, effective living wills signal to markets that failures are likely to be handled via bankruptcy rather than bailouts. This would have two benefits: directly reducing the moral hazard that results from bailouts and, should failure occur, minimizing market disruptions by providing a roadmap for dissolution under bankruptcy (Athreya and Jarque 2015).

Additionally, certain reforms could make the bankruptcy process less costly and disruptive when it comes to large firms. Currently, certain short-term financial instruments and derivatives are exempt from bankruptcy's “automatic stay,” a safe harbor treatment that may over-encourage the use of such instruments, thereby enhancing the fragility of the financial system. Policymakers should examine the bankruptcy code for opportunities, such as limiting this exemption, that could reduce the spillovers that result from failing firms when they do not receive government support. This, too, could make bankruptcy — rather than bailouts — the more attractive option for regulators during a crisis (Lacker 2014).

Taking Away the Ability to Conduct Bailouts
To help reduce the possibility that a large firm would have to fail for the government's commitment against bailouts to be demonstrated, an additional option is for policymakers to be “tied to the mast” with explicit rules that limit their ability to intervene.

The Dodd-Frank Act attempted this by scaling back
the Fed’s ability to lend in “unusual and exigent” circumstances under section 13(3) of the Federal Reserve Act. Rather than lending to specific firms, as it did during the financial crisis, the Fed can now offer support only to entire markets and only with advance approval from the U.S. Treasury. The Fed still possesses expansive authority to lend in a way that protects creditors, however, since even a broad-based lending program could be particularly attractive to certain troubled firms. The Fed’s 13(3) authority arguably is inessential to the Fed’s core function of providing monetary stability, and the expectation of bailouts that this authority perpetuates, given the Fed’s actions in its history, continues to threaten financial stability (Haltom and Lacker 2013).

Other aspects of the Dodd-Frank Act have the potential to broaden policymakers’ discretion if not implemented carefully. For example, regulating systemic risk requires some specificity about what makes an institution systemically important. That alone is a difficult question. Despite the notion that some firms are too big to fail, size is not the only determinant of riskiness. A firm’s connectedness to others in the financial system is also important. Connectedness, however, is often hard to determine; there are many possible direct and indirect avenues through which one firm may be exposed to others, and those exposures evolve continuously with innovation (Price and Walter 2011). Therefore, the basic task of identifying systemically important firms necessarily entails discretion (Grochulski and Slivinski 2009).

Another provision of the Dodd-Frank Act, the Orderly Liquidation Authority (OLA), gives the government authority to step in to unwind the liabilities of failing large financial institutions and allocate losses among creditors. It is difficult to specify in advance the terms of such arrangements since designating any threshold for which creditors will bear losses creates considerable incentive for investors to place themselves on the beneficial side of the line, subsidizing activities located there. Thus, OLA gives the Federal Deposit Insurance Corporation (FDIC) broad discretion over how it balances the competing goals of buffering financial market distress (perhaps bailing out short-term creditors) and limiting moral hazard (perhaps allowing creditors to bear losses) (Pellerin and Walter 2012). To the extent that such discretion in policymaking is unavoidable, it should include clear terms of accountability like the least-cost resolution requirements that apply to the FDIC when it unwinds failing banks (Lacker and Weinberg 2010). Once credible living wills are in place, however, repealing OLA could help end the expectation of bailouts.

Conclusion

Many onlookers believe financial crises and excessive risk-taking are inherent features of a market system. In this view, the government safety net is required to give investors the confidence that minimizes destabilizing behavior. An alternative view, one held by the Richmond Fed, is that poor incentives, often created by well-intended past market interventions, are more likely to be behind episodes of financial panic (Lacker 2013). The financial crisis of 2007–08 was the culmination of many factors, but chief among them was our financial system’s long history of government intervention that extends back at least to the late 1970s. Such interventions created incentives for increased risk-taking. These incentives are much harder to correct than they were to create, but doing so is imperative to financial stability.

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